



City of Casa Grande

Pavement Management System



Understanding Pavement Condition Index (PCI)

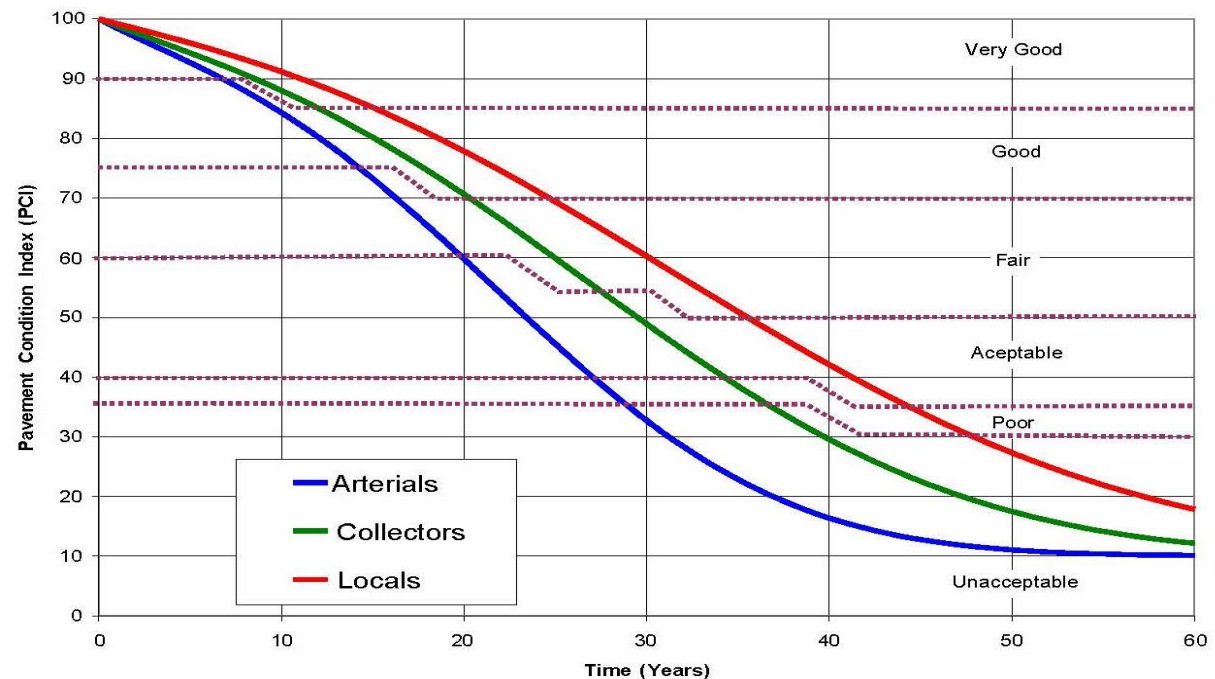


Figure 5 – Understanding the Pavement Condition Index Score



PCI Data Collection

- ★ In 2010 we hired Infrastructure Management Services (IMS) to collect comprehensive data to determine PCI scores for every street segment in the City of Casa Grande.



Our Average PCI

- ★ In 2010 our Average Network PCI was at 75
- ★ 8 years later our average network PCI is at 72



Treatments

★ Fog Seal	75-85 PCI
★ Slurry Seal	65-75 PCI
★ Rubber Chip Seal	55-65 PCI
★ Mill and Overlay	45-55 PCI
★ Partial Reconstruction	35-45 PCI
★ Full Reconstruction	0-35 PCI



Fog Seal 75-85 PCI







Slurry Seal/Micro Seal 65-75 PCI







Rubber Chip Seal 55-65 PCI







Mill and Overlay 45-55 PCI





Partial Reconstruction 35-45 PCI





Full Reconstruction 0-35 PCI





Process

- ★ We alternate what streets receive maintenance.
- ★ Arterials and collector streets one year and residential streets the next.
- ★ FY 20 we will be doing local streets.
- ★ Capital Improvement Projects are separate from our pavement preservation.



Lucity Pavement Management

- ★ With the system you can create many scenarios
- ★ Budget based analysis
- ★ PCI based analysis
- ★ Long range forecasting (planning)
(performance)



Lucity/Arterials and Collectors

Lucity 7.5 - City of Casa Grande

System General Environmental Sewer Storm Transportation Water Electric Gas Trees/Parks Equipment Facility Refuse/Recycling Work Inventory Mobile View Window Help

Budget Forecasting Models - No Filter

Model Rec ID: 652 Model Description: 1.5 Million Arterials

Parameters | Year-End Summary Results | Selected Supersegments Results | All Supersegment Results | All Subsegment Results | Comments

Model Year	Superseg Code	Superseg Desc	Selected	Forced	Rehab Priority	Rehab Group	KeyZone	Superseg Priority	Rehab Text
2016	362	Earley Rd From S Pueblo Dr To ...	No	No			No	74.29	
2016	360	Colorado St-360	No	No			No	78.86	
2017	360	Colorado St-360	No	No			No	78.86	
2016	358	Colorado St-358	No	No			No	77.78	
2017	358	Colorado St-358	No	No			No	77.78	
2017	356	Colorado St-356	No	No			No	70.42	
2016	356	Colorado St-356	No	No			No	70.42	
2017	354	Colorado St-354	No	No			No	86.21	
2016	354	Colorado St-354	No	No			No	86.21	
2017	352	Colorado St-352	No	No			No		
2016	352	Colorado St-352	No	No			No		
2017	350	9th St-350	No	No					
2016	350	9th St-350	Yes	No	8.00				
2016	348	9th St-348	Yes	No	8.00				
2017	348	9th St-348	No	No					
2017	346	Potterbaum Ave-346	No	No					
2016	346	Potterbaum Ave-346	Yes	No	8.00				
2017	344	Potterbaum Ave-344	No	No					
2016	344	Potterbaum Ave-344	Yes	No	8.00				
2016	342	Chuichu Rd From SOUTH END T...	No	No					
2017	342	Chuichu Rd From SOUTH END T...	Yes	No	5.00				
2017	340	Ghost Ranch Rd-340	No	No					
2016	340	Ghost Ranch Rd-340	No	No					
2017	338	Ghost Ranch Rd-338	No	No					
2016	338	Ghost Ranch Rd-338	No	No					

Street Pavement Modeling Budget Scenarios - No Filter

Budget: 325 1.5 Million Arterials

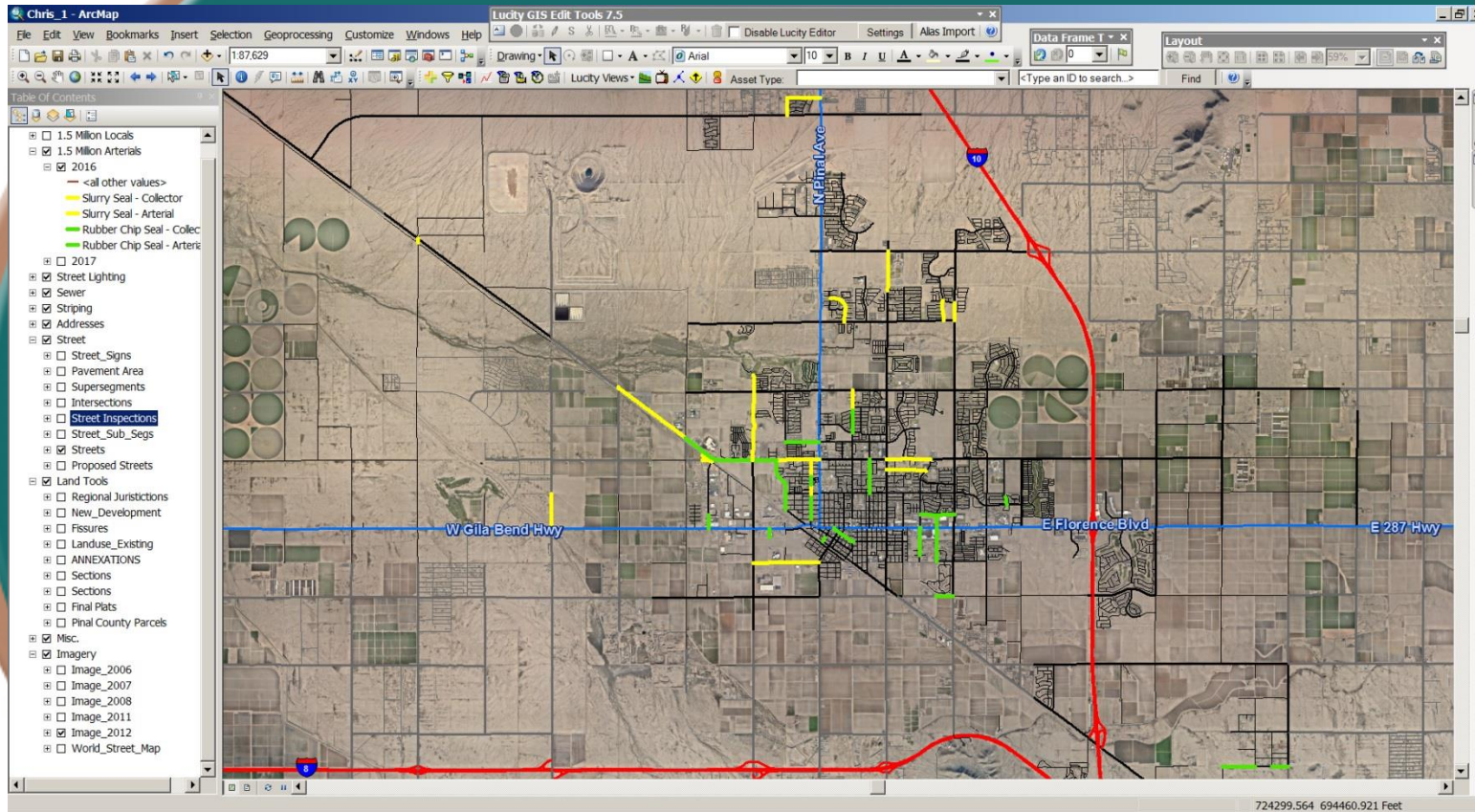
Attributes | Annual Budget Details | Active Rehab Techniques

Rehab	Rehab Text	Pavement	Classification	Manit Seq	Rehab Group	% Budget
204	Slurry Seal - Arterial	Asphalt	Principle Arterial	4.0	2	100.00
204	Slurry Seal - Arterial	Asphalt	Minor Arterial	4.0	2	100.00
207	Rubber Chip Seal - ...	Asphalt	Principle Arterial	7.0	3	100.00
207	Rubber Chip Seal - ...	Asphalt	Minor Arterial	7.0	3	100.00
205	Slurry Seal - Collector	Asphalt	Major Collector	5.0	2	100.00
208	Rubber Chip Seal - ...	Asphalt	Major Collector	8.0	3	100.00
205	Slurry Seal - Collector	Asphalt	Minor Collector	5.0	2	100.00
208	Rubber Chip Seal - ...	Asphalt	Minor Collector	8.0	3	100.00

Record 29 of 31 View Mode Ready...



Lucity and GIS





Lucity/Local Streets

Lucity 7.5 - City of Casa Grande

System General Environmental Sewer Storm Transportation Water Electric Gas Trees/Parks Equipment Facility Refuse/Recycling Work Inventory Mobile View Window Help

Budget Forecasting Models - No Filter

Model Rec ID: 672 Model Description: 1.5 Million Locals

Parameters | Year-End Summary Results | Selected Supersegments Results | All Supersegment Results | All Subsegment Results | Comments

Year: 2016

Rehab Priority	Rehab Group	Superseg Code	Superseg Desc	Rehab Text	Surface Text	PMS Classification Text
3.00	1	248	Dave White Regional-248	Fog Seal - Local	Asphalt	Local
6.00	2	1178	Sherman St-1178	Slurry Seal - Local	Asphalt	Local
3.00	1	1168	Burns Rd-1168	Fog Seal - Local	Asphalt	Local
3.00	1	1142	Sherman Pl-1142	Fog Seal - Local	Asphalt	Local
9.00	3	10454	Wildflower South-10454	Rubber Chip Seal - ...	Asphalt	Local
3.00	1	10452	Wildflower North-10452	Fog Seal - Local	Asphalt	Local
6.00	2	10420	The Cottonwoods-10420	Slurry Seal - Local	Asphalt	Local
3.00	1	10408	Sunset View-10408	Fog Seal - Local	Asphalt	Local
3.00	1	10400	Southfork-10400	Fog Seal - Local	Asphalt	Local
3.00	1	10394	SK Ranch-10394	Fog Seal - Local	Asphalt	Local
6.00	2	10386	Santa Rosa-10386	Slurry Seal		
3.00	1	10378	Rodeo Ranch Estates-10378	Fog Seal - Local		
6.00	2	10359	Quail Run McCarthy Ranch-10359	Slurry Seal		
6.00	2	10348	Pebbles Trail-10348	Slurry Seal		
3.00	1	10252	Mission Royale Block F-10252	Fog Seal - Local		
3.00	1	10250	Mission Royale Block E-10250	Fog Seal - Local		
3.00	1	10246	Mission Ranch-10246	Fog Seal - Local		
3.00	1	10244	Mission Grande Amended-10244	Fog Seal - Local		
6.00	2	10242	Melrose Dr French to Shultz-10242	Slurry Seal		
3.00	1	10240	McCarthy Ranch Parcel 6-10240	Fog Seal - Local		
3.00	1	10238	McCarthy Ranch Parcel 5-10238	Fog Seal - Local		
3.00	1	10236	McCarthy Ranch Parcel 4 Amen...	Fog Seal - Local		
3.00	1	10234	McCarthy Ranch Parcel 3-10234	Fog Seal - Local		
9.00	3	10216	Martin-10216	Rubber Ch...		
6.00	2	10212	Las Villas Hohokum Laurel Garde...	Slurry Seal		

Street Pavement Modeling Budget Scenarios - No Filter

Budget: 31 1.5 Million Locals

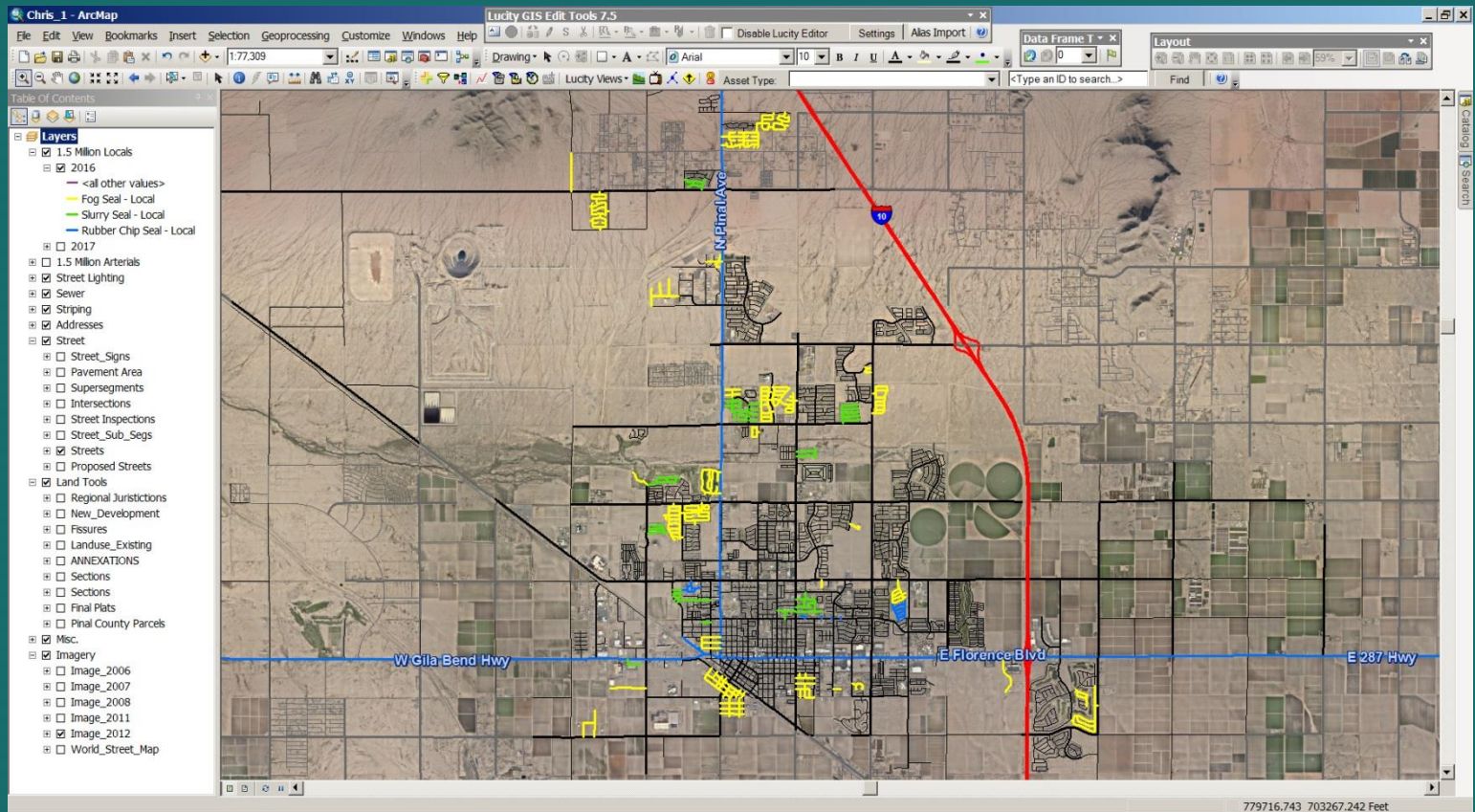
Attributes | Annual Budget Details | Active Rehab Techniques

Rehab	Rehab Text	Pavement	Classification	Manr Seq	Rehab Group	% Budget
203	Fog Seal - Local	Asphalt	Local	3.0	1	100.00
206	Slurry Seal - Local	Asphalt	Local	6.0	2	100.00
209	Rubber Chip Seal - ...	Asphalt	Local	9.0	3	100.00

Record 30 of 31 View Mode Ready...



Lucity and GIS



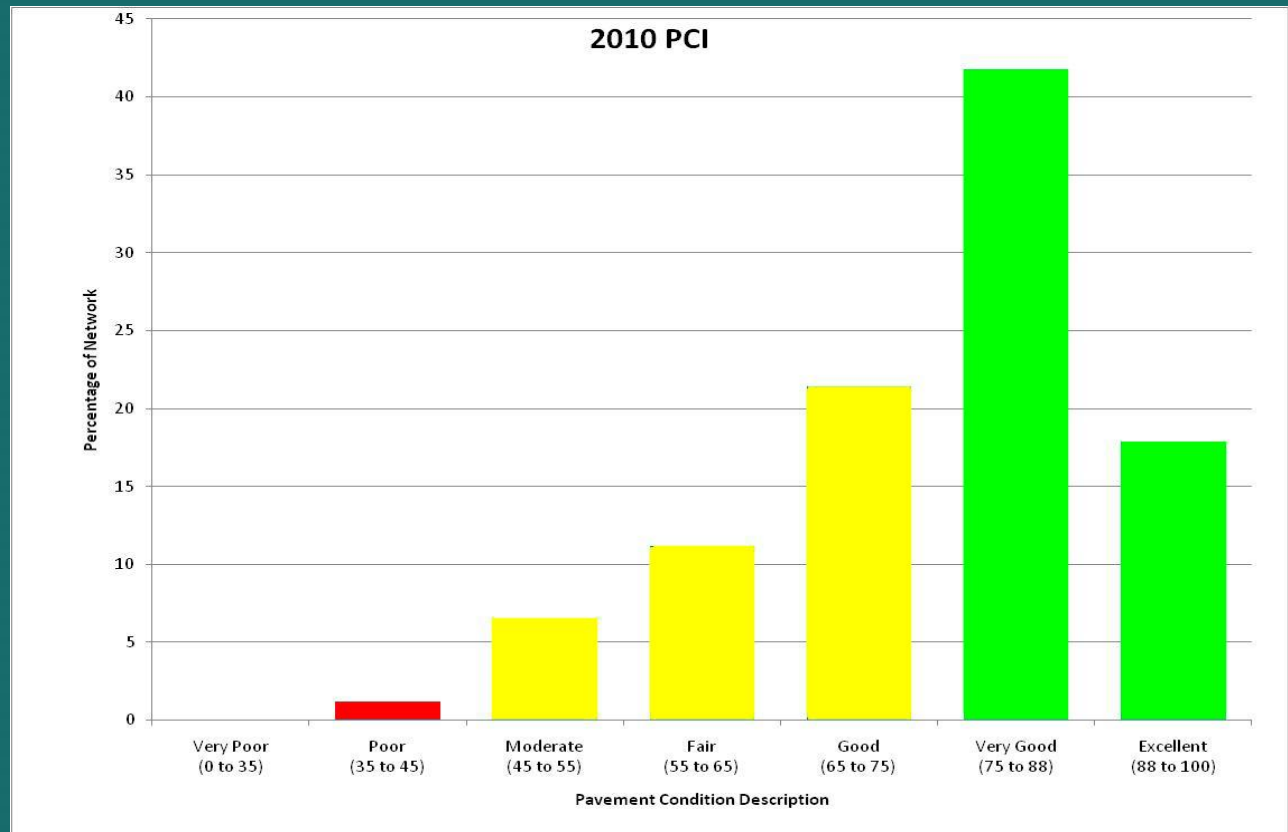


What's next?

- ★ The model has given us a base point to determine what streets need treatment based on funding.
- ★ From this point we have to determine what streets will get grouped together and what treatments we will use through field surveys and team decisions.
- ★ Next we perform an opinion of probable cost with current contract pricing and contingency.
- ★ Once the team has come to a final decision we secure contracts and final documents to present to City Council.

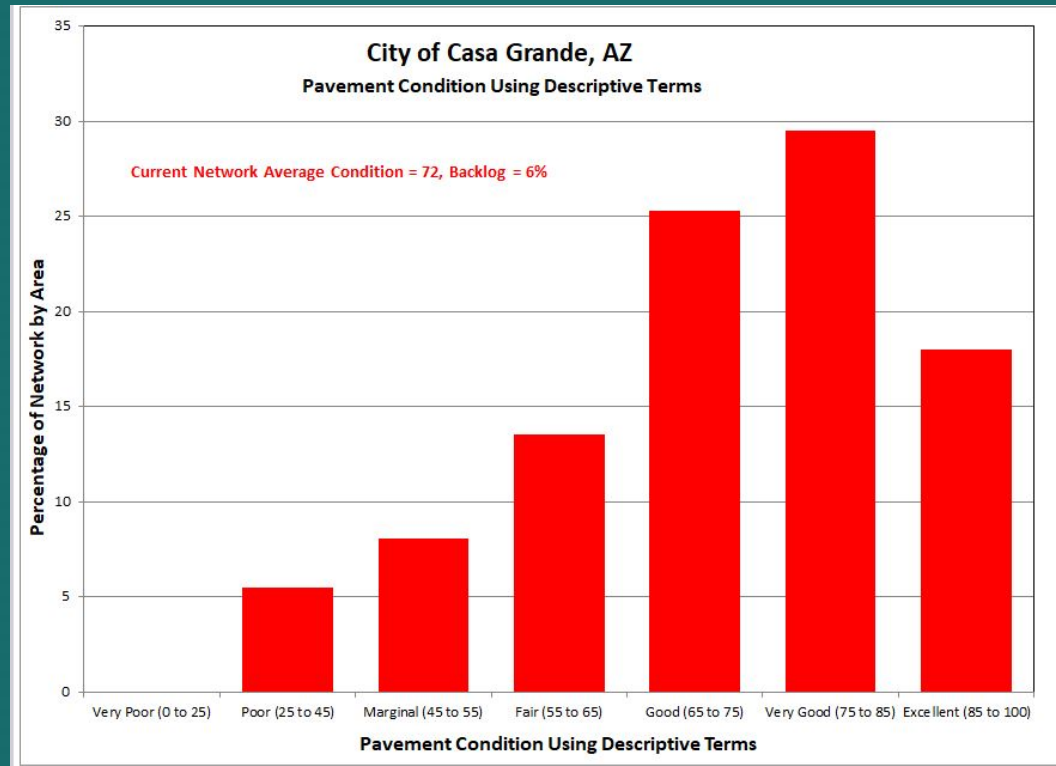


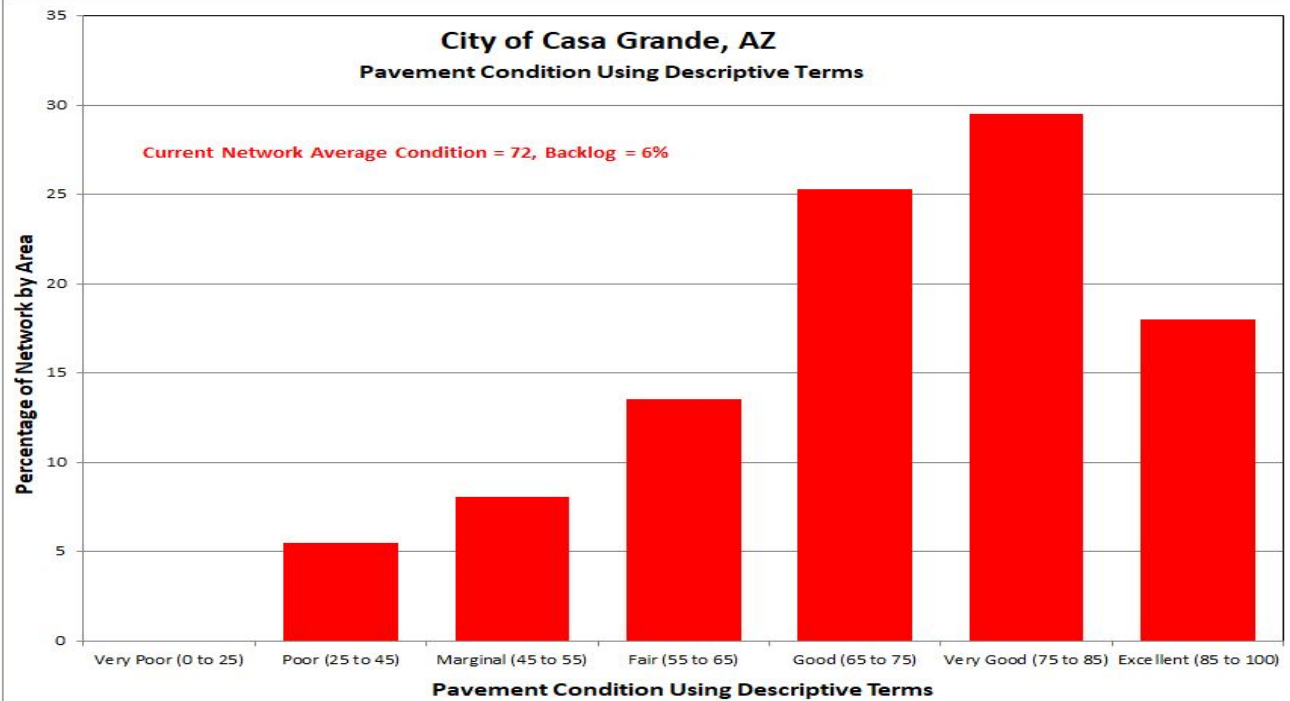
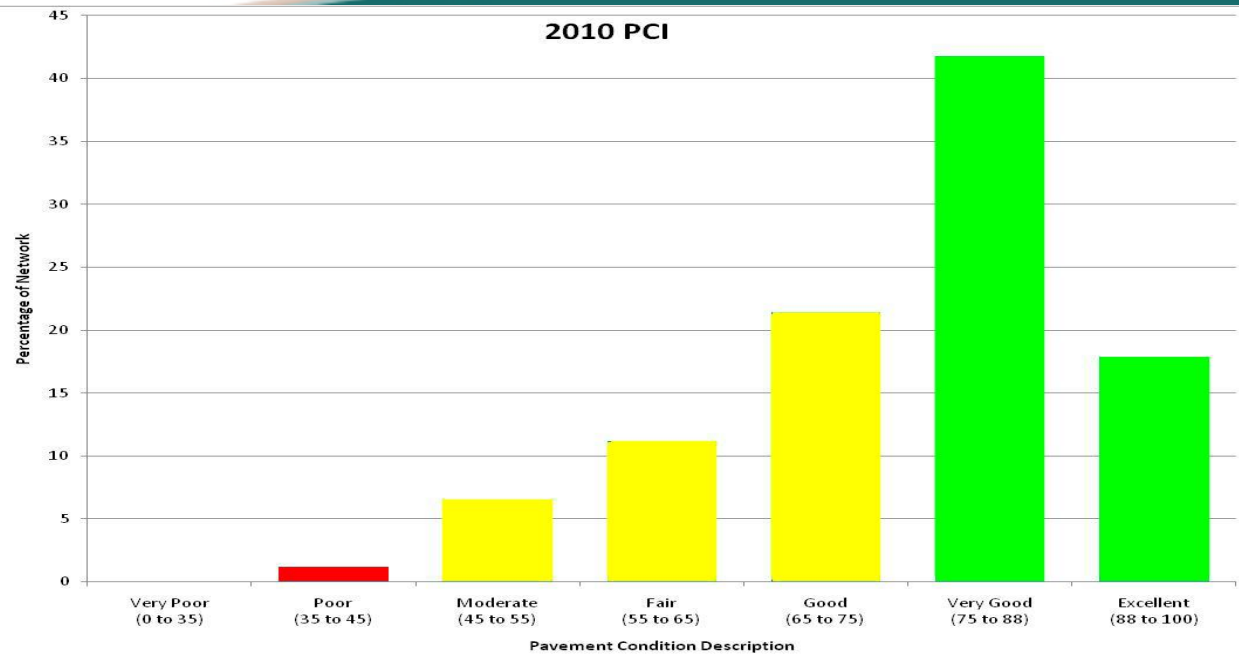
Average PCI 2010





Average PCI 2018



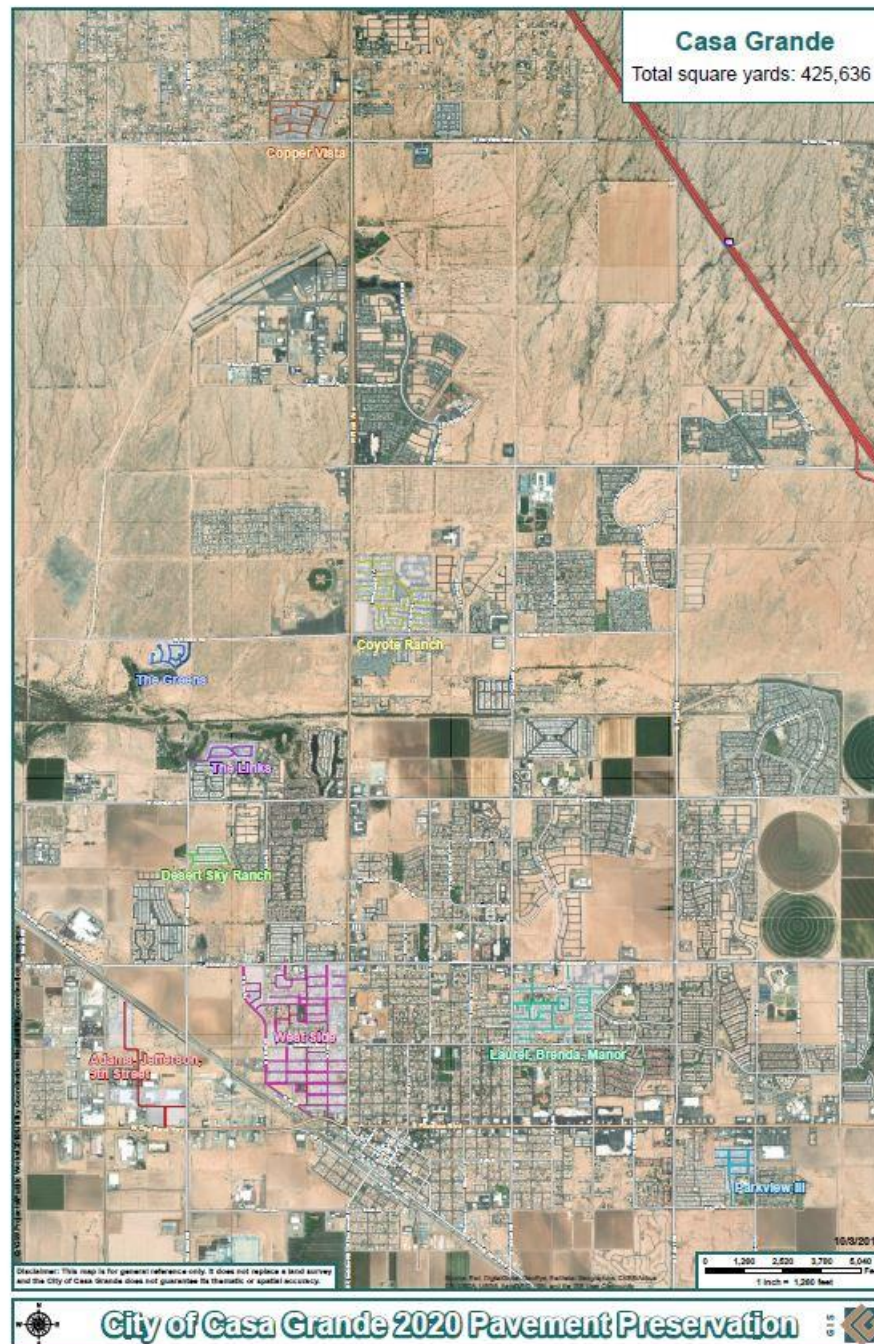


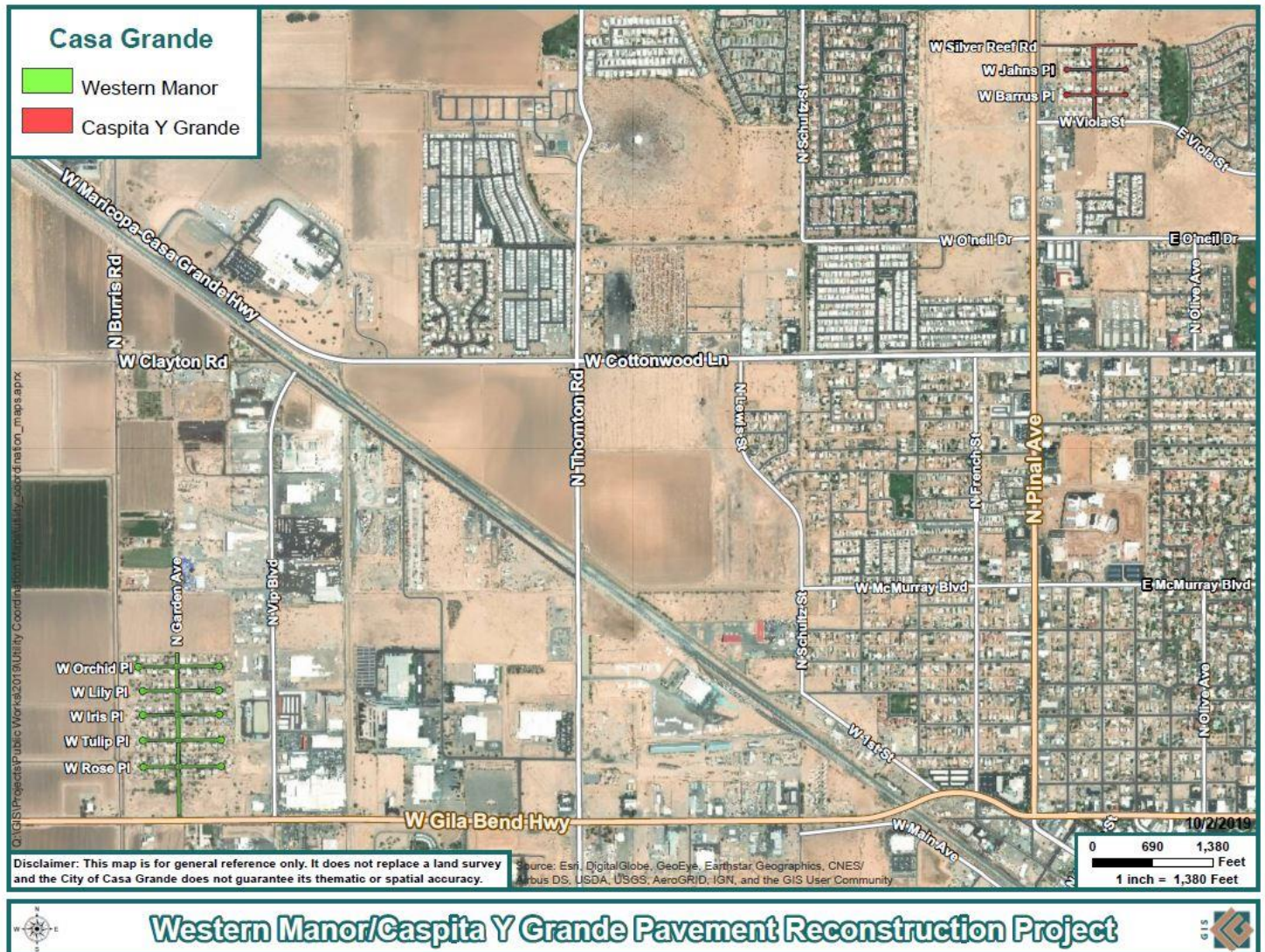


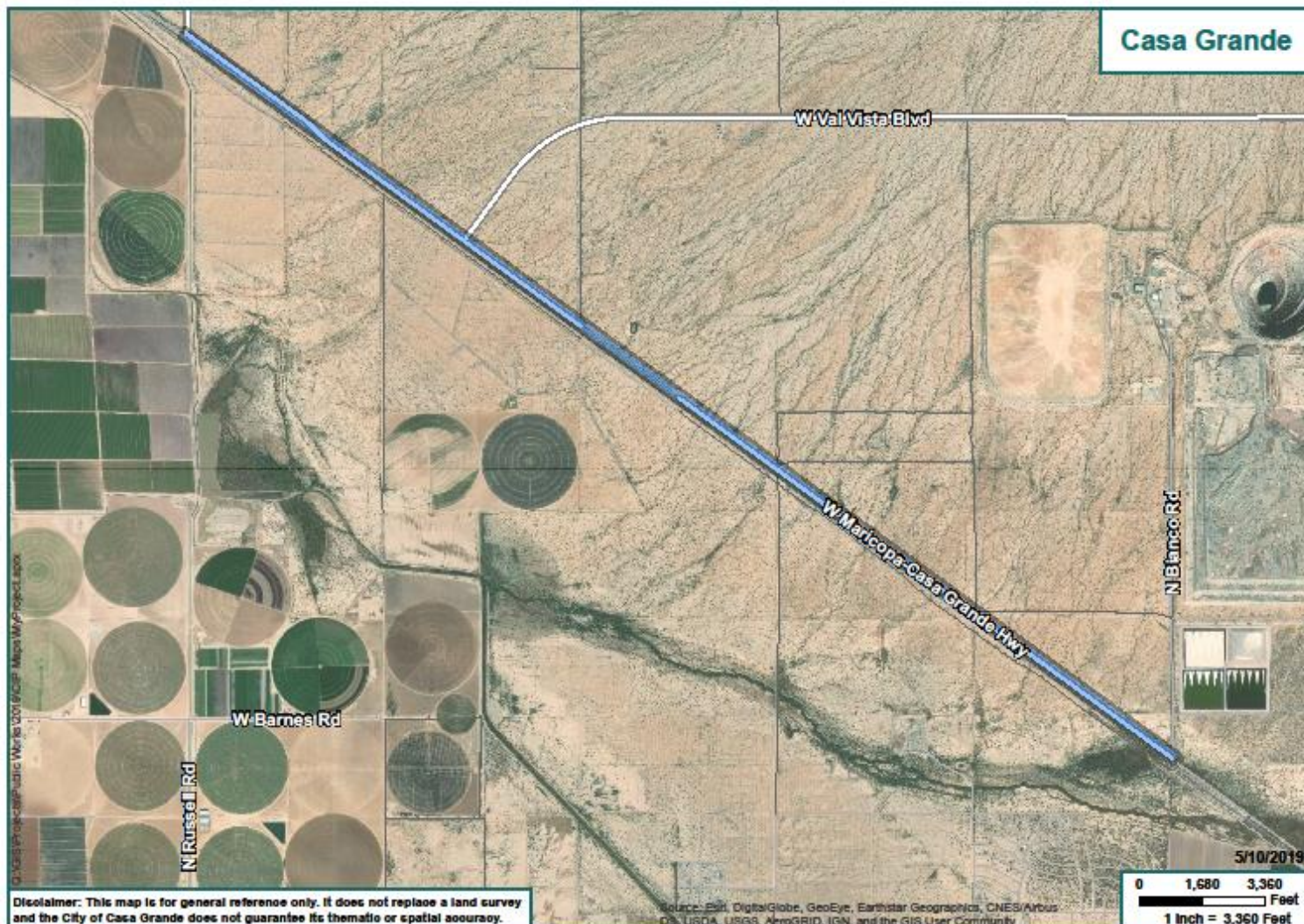
Past 5 Yr. CIP'S

★ Midway Road	\$1,485,510
★ Arica/Isom Double Chip	\$210,000
★ Right Turn Lane SB Arizola Road at Kortsen	\$77,723
★ Roadway Network Update	\$158,850
★ Peart Road	\$1,400,000
★ SB Additional Lane. Kortsen to O'neil	
★ Rancho Grande Reconstruction	\$2,970,570
★ Rodeo Road Additional Lane	\$135,752









CIP - Casa Grande/Maricopa Hwy Intersection



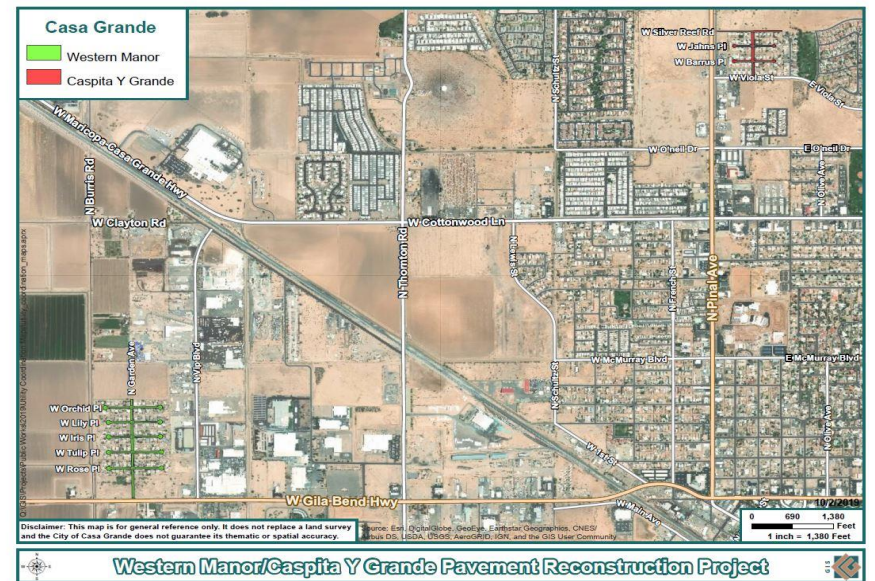
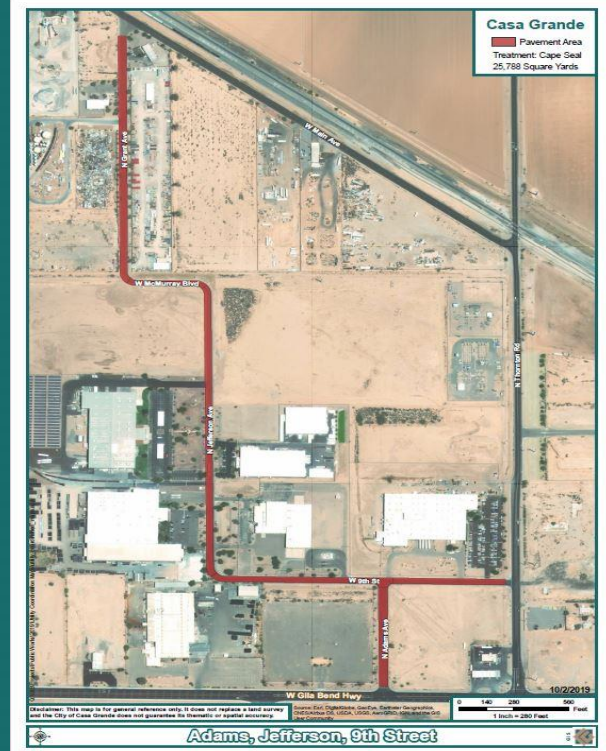
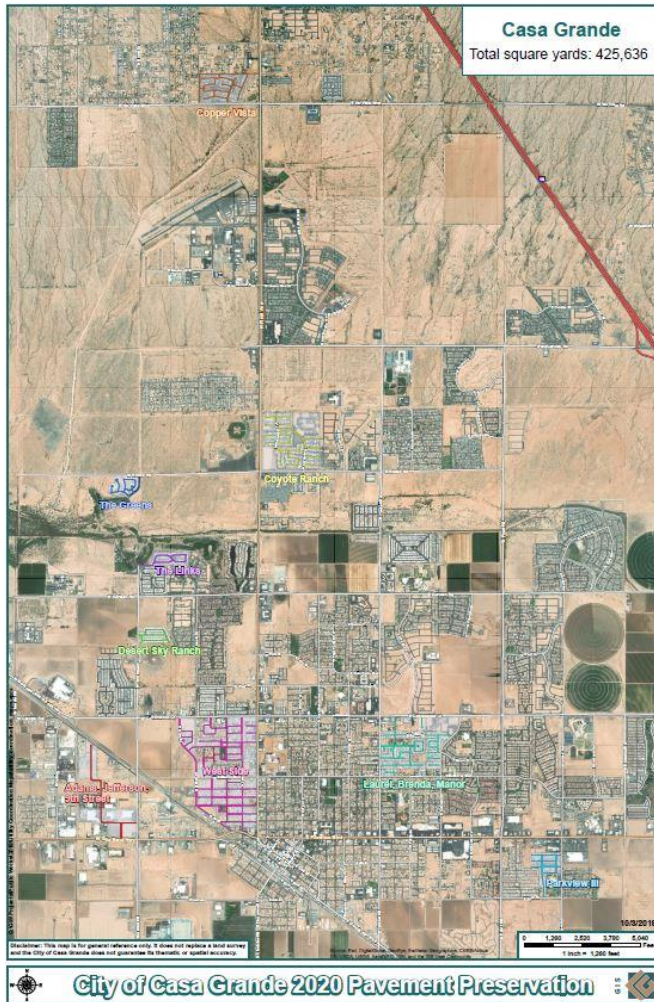


CIP - Florence St and Main Ave





Questions?





SeeClickFix

Report issues when
you see them!

- Pot holes
- Lifted sidewalks
- Street light outages
- Broken/missing street signs
- Clogged/dirty stormwater drains

Get Connected.
Get Involved.
Get Results.

The SeeClickFix App is the fastest, easiest way for you to submit non-emergency requests to the city, stay updated, and initiate change.



SeeClickFix



Submitting a Request

New Request

Use the form below to create a request as yourself, an existing SeeClickFix user, or register a new user.



Request Category (required)

Search for request categories

Parks

Streets

Trash

Wastewater/Sewer

Other



Submitting a Request

May submit
anonymously, or, enter
your email and receive
updates as the request
is addressed.

Request Questions

Issue Title (required)

Description

Phone number of requester:

☒ Subscribe to this request

Request Image

Caller Details

Is the caller providing an email?

Caller Email (required)

Caller phone number



Follow us on Facebook!

Casa Grande Public Works

